

# KINEMATIC VISCOSITY

## KV5000 Kinematic Viscosity Bath

Koehler KV5000 series kinematic viscosity baths with the optical flow detection system provides automatic viscosity measurements of petroleum and petrochemical products. Includes communication and power ports for each optical detection assembly, and can utilize up to five optical assemblies. Two additional positions are available for manual viscosity measurements, and all positions can be used in the manual mode. The interchangeable Ubbelohde, Cannon® Fenske, and Reverse Flow viscometer tubes are quickly installed and removed from the detection assemblies for cleaning and simple tube changes. Allows automatic viscosity measurements and results calculation without an external PC. Motorized stirrer provides complete circulation without turbulence. Microprocessor PID circuitry assures precise, reliable temperature control within ASTM specified tolerances throughout the operating range. Simple push-button controls and dual digital displays permit easy setting and monitoring of temperature. Two place calibration offset capability is provided. Built-in cooling coil facilitates temperature control at ambient or below ambient temperatures.

### Viscosity Software

Software automatically downloads test data and calculates final test results from sample efflux times. Also included is a database for storing test data, determining test averages, standard deviations, and ASTM test repeatability as well as providing a method for tracking both instrument and viscometer tube calibrations.

- Complete instrument and data acquisition system exclusively designed for conducting D445, IP71 and related test methods
- Optical sensor detection system accurately measures sample flow and automatically calculates kinematic viscosity results
- Powerful software system for PC platforms operating in Windows®98 SE, 2000, NT, ME, and XP environments
- Option wireless data acquisition package available
- Automatic calculation and display of results in viscosity units or seconds
- Accommodates Ubbelohde, Cannon®Fenske, and Reverse Flow viscometers
- High accuracy temperature control with dual digital displays show setpoint and actual bath temperature with selectable scale (°C or °F)
- Stand alone feature provides for automated testing without an external PC
- Integrated redundant overtemperature and low liquid level cut-off circuitry
- Software exports test data with graphs and test parameters direct to Microsoft®Excel or in ASCII file format for use with LIMS or any other spreadsheet program
- Integrated digital timing for easy measurement of sample efflux times



**K23702-OS Kinematic Viscosity Bath (KV5000)  
with K23780-CF Optical Sensor and CF Routine Tube 378-025-C02-OS**

### Specifications

Conforms to the specifications of:

ASTM D445, D2170, D6074, D6158; IP 71, 319; ISO 3104; DIN 51550; FTM 791-305; NF T 60-100

Temperature range: Ambient to 150°C (302°F); sub-ambient to 10°C with external cooling

Temperature display: digital with 0.1 °C/°F resolution, calibrate to 0.01 °C/°F

Temperature control accuracy and uniformity: Exceeds ASTM requirements

**Fully Automated Viscosity and Houillon Viscosity Instruments Available,  
Inquire with Koehler Customer Service.**



Software compatible, inquire  
with Koehler Customer Service.

### Ordering Information

Catalog No.	Model	Description	Electrical Requirements C €	Order Qty
K23702-OS	KV5000	12" Kinematic Viscosity Bath	115V 60Hz	1
K23792-OS	KV5000	12" Kinematic Viscosity Bath	220-240V 50/60Hz	
K23708-OS	KV5000	18" Kinematic Viscosity Bath	115V 60Hz	
K23798-OS	KV5000	18" Kinematic Viscosity Bath	220-240V 50/60Hz	
K23780-SFW	KV5000	Kinematic Viscosity Software Package		1
K23780-WLS	KV5000	Kinematic Viscosity Software Package Wireless		
K23780-CF		Optical Sensor for Cannon®Fenske viscometers		1-5
378-025-C01-OS thru 378-700-C01-OS		Cannon®Fenske Routine Viscometers Size 25 thru 700 (Specify Size when ordering)		1-5
K23780-RF		Optical Sensor for Opaque Reverse Flow viscometers		1-5
378-025-C02-OS thru 378-700-C02-OS		Cannon®Fenske Opaque Viscometers Size 25 thru 700 (Specify Size when ordering)		1-5
K23780-UB		Optical Sensor for Ubbelohde viscometers		1-5
378-000-C03-OS thru 378-005-C03-OS		Ubbelohde Viscometers Size 0 thru 5 (Specify Size when ordering)		1-5